

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claim 1 (currently amended): An organic electroluminescent display device including at least one carrier-transporting layer comprising a liquid crystal substance and at least one organic luminous layer sandwiched between a transparent electrode and a backside electrode each held in parallel to the other, the organic electroluminescent display device being laid on a surface of a substrate and further comprising a polarizing plate laid on the other surface of the substrate,

wherein a layer adjacent the liquid crystal substance is an oriented layer; and

wherein said display device is driven as a liquid crystal display device at a voltage lower than a light emission initiating potential of the organic luminous layer or as an electroluminescent display device at a voltage higher than the light emission initiating potential of the organic luminous layer in response to magnitude of an applied voltage.

Claim 2 (original): The organic electroluminescent display device according to Claim 1, wherein the organic luminous layer includes a polymer.

Claim 3 (currently amended): The organic electroluminescent device according to Claim 1, wherein the organic luminous layer includes a low-molecule-dispersed polymer dispersing a low molecule therein.

Claim 4 (cancelled).

Claim 5 (original): The organic electroluminescent display device according to Claim 1, wherein the carrier-transporting layer includes a nematic liquid crystal layer.

Claim 6 (original): The organic electroluminescent display device according to Claim 1, wherein the carrier-transporting layer comprises a liquid crystal layer having a low-molecular carrier-transporting substance dispersed therein.

Claim 7 (original): The organic electroluminescent display device according to Claim 6, wherein the liquid crystal layer contains two or more different organic compounds.

Claim 8 (cancelled).

Claim 9 (currently amended): An organic electroluminescent display device including at least one carrier-transporting layer and at least one organic luminous layer comprising a liquid crystal substance sandwiched between a transparent electrode and a backside electrode held in parallel to said transparent electrode, the organic electroluminescent display device being laid on a surface of a substance and further comprising a polarizing plate laid on the other surface of the substrate,

wherein a layer adjacent the liquid crystal substance is an oriented layer; and

wherein said display device is driven as a liquid crystal display device at a voltage lower than a light emission initiating potential of the organic luminous layer or as an electroluminescent display device at a voltage higher than the light emission initiating potential of the organic luminous layer in response to magnitude of an applied voltage.

Claim 10 (original): The organic electroluminescent display device according to Claim 9, wherein the carrier-transporting layer comprises a polymer.

Claim 11 (currently amended): The organic electroluminescent display device according to Claim 9, wherein the carrier-transporting layer comprises ~~low molecule dispersed a polymer dispersing a low molecule~~ dispersing a low molecule therein.

Claim 12 (cancelled).

Claim 13 (original): The organic electroluminescent display device according to Claim 9, wherein the organic luminous layer includes a nematic liquid crystal layer.

Claim 14 (original): The organic electroluminescent display device according to Claim 13, wherein the liquid crystal layer includes two or more different organic compounds.

Claim 15 (cancelled).

Claim 16 (currently amended): An organic electroluminescent display device including an organic luminous layer and a carrier-transporting layer, either one or both of which includes a liquid crystal, sandwiched between a transparent electrode and a backside electrode held in parallel to said transparent electrode, the organic electroluminescent display device being laid on a surface of a substrate and further comprising a polarizing plate laid on the other surface of the substrate,

wherein a layer adjacent the liquid crystal is an oriented layer; and

wherein said display device is driven as a liquid crystal display device at a voltage lower than a light emission initiating potential of the organic luminous layer or as an electroluminescent display at a voltage higher than the light emission initiating potential of the organic luminous layer device in response to magnitude of an applied voltage.

Claim 17 (currently amended): The organic electroluminescent display device according to Claim 16, wherein the liquid crystal includes two or more of different organic compounds.~~display device in response to magnitude of an applied voltage.~~

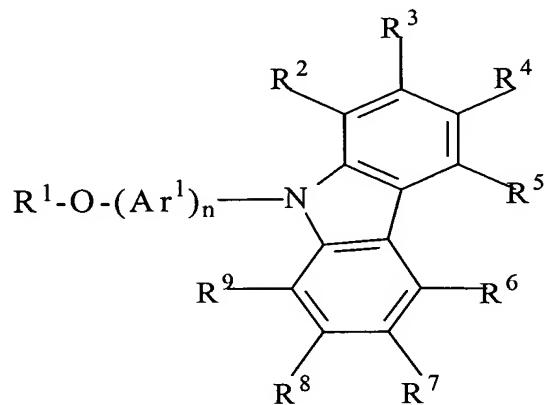
Claim 18 (cancelled).

Claim 19 (original): An organic electroluminescent display device including at least one organic luminous layer comprising an electroluminescent liquid crystal sandwiched between a transparent electrode and a backside electrode each held in parallel to the other,

wherein a layer adjacent the electroluminescent liquid crystal is an oriented layer; and

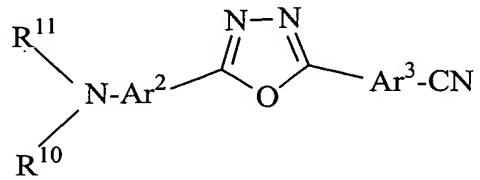
wherein said display device is driven as a liquid crystal display device or as an electroluminescent display device in response to magnitude of an applied voltage.

Claim 20 (withdrawn): An organic electroluminescent liquid crystal comprising a chemical compound having a general constitutional formula of:



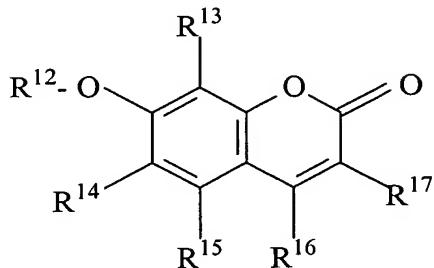
wherein R¹ is a straight-chained alkyl group containing 1-20 carbon atoms, R² to R⁹ is individually hydrogen or an alkyl group containing 1-3 carbon atoms, and Ar¹ is a substituted or non-substituted aryl group containing 6-14 carbon atoms.

Claim 21 (withdrawn): An electroluminescent liquid crystal comprising a chemical compound having a general constitutional formula of:



wherein R¹⁰ and R¹¹ are individually straight-chained alkyl groups containing 1-20 carbon atoms, and Ar² and Ar³ are individually substituted or non-substituted aryl groups containing 6-14 carbon atoms.

Claim 22 (withdrawn): An electroluminescent liquid crystal comprising a chemical compound having a general constitutional formula of:



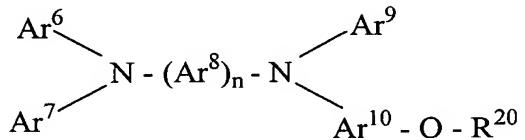
wherein R¹² is a straight-chained alkyl group containing 1-20 carbon atoms, and R¹³ to R¹⁷ are individually hydrogen or alkyl groups containing 1-3 carbon atoms.

Claim 23 (withdrawn): An electroluminescent liquid crystal comprising a chemical compound having a general constitutional formula of:



wherein R¹⁸ and R¹⁹ are individually straight-chained alkyl groups containing 1-20 carbon atoms, and Ar⁴ and Ar⁵ are individually substituted or non-substituted aryl groups containing 6-14 carbon atoms.

Claim 24 (withdrawn): An electroluminescent liquid crystal comprising a chemical compound having a general constitutional formula of:



wherein R²⁰ is a straight-chained alkyl group containing 1-20 carbon atoms, and Ar⁶ to Ar¹⁰ are individually substituted or non-substituted aryl groups containing 6-14 carbon atoms.

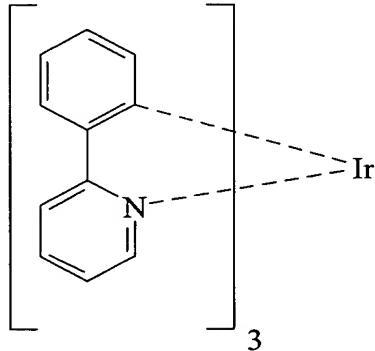
Claim 25 (new): An organic electroluminescent display device including at least one carrier-transporting layer comprised of a liquid crystal substance and at least one organic luminous layer sandwiched between a transparent electrode and a backside electrode each held in parallel to the other,

wherein said display device is driven as a liquid crystal display device or as an electroluminescent display device in response to magnitude of an applied voltage;

wherein the carrier-transporting layer comprises a liquid crystal layer having a low-molecular carrier-transporting substance dispersed therein;

wherein the liquid crystal layer contains two or more different organic compounds; and

wherein at least one of the two or more different compounds is Ir(ppy)₃ having a formula of:



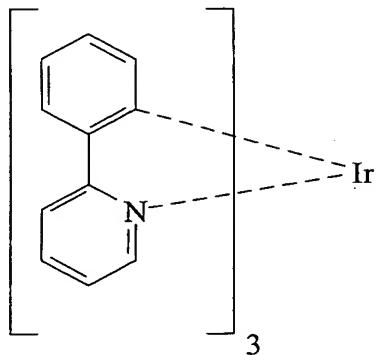
Claim 26 (new): An organic electroluminescent display device including at least one carrier-transporting layer and at least one organic luminous layer comprising a liquid crystal substance sandwiched between a transparent electrode and a backside electrode held in parallel to said transparent electrode,

wherein said display device is driven as a liquid crystal display device or as an electroluminescent display device in response to magnitude of an applied voltage;

wherein the organic luminous layer includes a nematic liquid crystal layer;

wherein the liquid crystal layer includes two or more different organic compounds; and

wherein at least one of the two or more different organic compounds is $\text{Ir}(\text{ppy})_3$ having a formula of:



Claim 27 (new): An organic electroluminescent display device including an organic luminous layer and a carrier-transporting layer, either one or both of which includes a liquid crystal, sandwiched between a transparent electrode and a backside electrode;

wherein said display device is driven as a liquid crystal display device or as an electroluminescent display device in response to magnitude of an applied voltage;

wherein the liquid crystal includes two or more different organic compounds; and

wherein at least one of the two or more different organic compounds is $\text{Ir}(\text{ppy})_3$ having a formula of:

